

CLAIMS

1. A marker-zone to determine a position of a head on a printed media for use in self-servo writing of a data storage device, comprising:

one or more edges defined by a radial transition from a presence of a transition-pair to an absence of the transition-pair;

wherein at least one of the one or more edges is located at a radial position;

and

wherein the at least one of the one or more edges precedes one or more chevrons located at the radial position.

2. The marker-zone of claim 1, wherein the one or more chevrons are a zig-burst and a zag-burst.

3. The marker-zone of claim 1, wherein the one or more edge includes a first edge and a second edge; and

wherein the at least one of the one or more edges is the first edge.

4. A template pattern to determine a position of a head on a printed media for use in self-servo writing of a data storage device, comprising;

a plurality of chevrons;

a plurality of pulse preceding the plurality of chevrons, the plurality of pulses extending from an inner diameter of said printed media to an outer diameter of said printed media;

wherein at least one of the plurality of pulses includes a gap such that the pulse is discontinuous; and

wherein said position is determined by a location of said head relative to the gap.

5. The template pattern of claim 4, wherein the gap includes a first edge and a second edge.

6. The template pattern of claim 5, wherein said position includes a gross position and a fine position;

wherein the gross position is determined by the location relative to one or both of the first edge and the second edge; and

wherein the fine position is determined by a phase of at least one of the plurality of chevrons at the location.

7. The template pattern in claim 6, wherein the at least one of the plurality of chevrons at the location comprises one or both of a zig-burst and a zag-burst.

8. The template pattern of claim 4, wherein the plurality of chevrons comprises one or both of a plurality of zig-bursts and a plurality of zag-bursts.

9. The template pattern of claim 4, wherein the head is a read head.

10. The template pattern of claim 4, wherein the head is an MR head.
11. A pattern to determine a position of a head on a media, comprising:
a plurality of pulses extending radially along a surface of said media, at least one of the plurality of pulses including a gap such that the pulse is discontinuous; and
a plurality of chevrons located such that a portion at least one of plurality of chevrons is located at each point along a radius of the surface;
wherein said position is determined by a location of said head relative to the gap.
12. The pattern of claim 11, wherein the gap includes a first edge and a second edge.
13. The pattern of claim 12, wherein said position includes a gross position and a fine position;
wherein the gross position is determined by the location relative to one or both of the first edge and the second edge; and
wherein the fine position is determined by a phase of at least one of the plurality of chevrons at the location.
14. The template pattern of claim 13, wherein the at least one of the plurality of chevrons at the location comprises one or both of a zig-burst and a zag-burst.

15. The template pattern of claim 11, wherein the plurality of chevrons comprises one or both of a plurality of zig bursts and a plurality of zag-bursts.

16. The template pattern of claim 11, wherein the head is a read head.

17. The template pattern of claim 11, wherein the head is an MR head.

18. A data storage system having a rotatable medium for storing data, comprising:

a housing;

a spindle connected with the housing, said rotatable medium being connected with the spindle;

an actuator connected with the housing;

a head connected with the actuator such that the head can be positioned over a surface of the rotatable medium;

wherein the surface includes a pattern to self-servo write said rotatable medium, the pattern having;

a plurality of pulses extending radially along the surface, at least one of the plurality of pulses including a gap such that the pulse is discontinuous; and

a plurality of chevrons located such that a portion at least one of the plurality of chevrons is located at each point along a radius of the surface;

wherein a position of the head can be determined by a location of the head relative to the gap.

19. The system of claim 18, wherein the gap includes a first edge and a second edge.
20. The system of claim 19, wherein said position includes a gross position and a fine position;
- wherein the gross position is determined by the location relative to one or both of the first edge and the second edge; and
- wherein the fine position is determined by a phase of at least one of the plurality of chevrons at the location.
21. The system of claim 20, wherein the at least one of the plurality of chevrons at the location comprises one or both of a zig-burst and a zag-burst.
22. The template pattern of claim 18, wherein the plurality of chevrons comprises one or both of a plurality of zig-bursts and a plurality of zag-bursts.
23. The template pattern of claim 18, wherein the head is read head.
24. The template pattern of claim 18, wherein the head is an MR head.